

**REMARKS**

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 2-3, 7, 10-11, 14-16, and 43-44 are amended herein. Claims 2-44 are currently pending and under consideration in the present application, claims 12-13 and 17-42 of which are withdrawn from consideration.

**I. Rejection under 35 U.S.C. § 102**

In the Office Action, at pages 3-4, claims 2-11, 14-16, and 43-44 were rejected under 35 U.S.C. § 102(b) as being anticipated by Akasaka et al. (U.S. Patent No. 6,292,288).

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said pumping light source based on the optical powers of said plurality of reference lights such that the optical powers of said plurality of reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 2. In other words, the Raman amplifier of claim 2 includes both an equalization control section to control the pumping lights based on the optical powers of the reference lights such that the optical powers of the reference lights are equalized and a separate automatic level control section to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value. Thus, the automatic level control section can correct the result of the equalization control section based on the average value of the respective optical powers of the reference lights. In this manner, the invention of claim 2 is capable of managing the optical power balance of a WDM light and the optical power of the entire WDM light in a system using Raman amplification. Akasaka et al., as relied on by the Examiner, does not disclose both an equalization control section to control the pumping lights based on the optical powers of the reference lights such that the optical powers of the reference lights are equalized and a separate automatic level control section to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value.

Therefore, Akasaka et al. does not discuss or suggest all of the features of the invention of amended claim 2, so that claim 2 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said pumping light source based on the optical powers of said plurality of reference lights such that the optical powers of said plurality of reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 3.

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said pumping light source based on the optical powers of said plurality of reference lights such that the optical powers of said plurality of reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 14.

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said plurality of pumping lights based on the respective optical powers of said plurality of reference lights such that the optical powers of the reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 15.

Akasaka et al. does not discuss or suggest:

controlling, by an equalization control section included in the Raman amplifier, said plurality of pumping lights based on the respective optical powers of said plurality of reference lights such that the optical powers of the reference lights are equalized; and

controlling, by an automatic level control section included in the Raman amplifier, the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 16.

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said pumping light source based on the optical powers of said plurality of reference lights such that the optical powers of said plurality of reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 43.

Akasaka et al. does not discuss or suggest:

an equalization control section configured to control said pumping light source based on the optical powers of said plurality of reference lights such that the optical powers of said plurality of reference lights are equalized; and

an automatic level control section configured to control the optical powers of the pumping lights so that the average optical power of the reference lights is held to a predetermined value,

as recited in amended claim 44.

Therefore, claims 3, 14-16, and 43-44 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 102(b) rejections is respectfully requested.

Claims 4-7 and 10-11 depend either directly or indirectly from amended claims 2 and/or 3, and include all the features of claims 2 and/or 3, plus additional features that are not discussed or suggested by the reference relied upon. Therefore, claims 4-7 and 10-11 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 102(b) rejections is respectfully requested.

## **II. Rejection under 35 U.S.C. § 103**

In the Office Action, at page 5, claims 8-9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Akasaka et al. in view of Sobe (U.S. Patent Application Pub. No. 2003/0117694).

As discussed above, Akasaka et al. does not discuss or suggest all of the features of the inventions of amended claims 2 or 3. Sobe fails to make up for this deficiency in Akasaka et al. Claims 8-9 depend either directly or indirectly from amended claims 2 and 3, and include all the features of claims 2 or 3, plus additional features that are not discussed or suggested by the

references relied upon. Therefore, claims 8-9 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejections is respectfully requested.

## CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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